

It would appear that there is a tendency to greater bill-length in the south of the range of the species.

Yet another female of *N. b. bifasciata* (Shaw), originally identified as *N. bouvieri*, and collected by Petit in Cabinda at Chinchoxo (B. M. registered number 95. 5. 1. 2530), has been traced. It has wing 51, tail 32, culmen from base 19.5 mm. Number 2529 is a male, the type of *bouvieri*.

On two specimens of *Pericrocotus flammeus* (Forst.), the Scarlet Minivet, from Ujung Kulon

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During a collecting trip to Java's most western peninsula, Ujung Kulon, two specimens of *Pericrocotus flammeus* were secured which do not fit into a series of *siebersi* nor do they agree with the Sumatran subspecies *xanthogaster*, *modiglianii* and *minythomelas*. Therefore they seem important enough to be signalized in order to encourage future collectors in this area to pay special attention to the species. Below is a comparison with the material of the species in the Bogor Museum.

The individual variation in plumage of both sexes of *siebersi* is not worth mentioning. In the males there is some difference in tone of the orange-red on the underparts, the wings and the lower back including the tail-coverts but those parts are always less pure red than in the three other subspecies mentioned above. There is also some variation in the tint of the black parts but the average *siebersi* seems less extensively bluish-black than males of the three other races.

The females show some variation in extent of the yellow spot on the forehead and the yellow on the wings and they also vary somewhat in the tone of this colour on the under surface, lower back and tail-coverts. But this yellow, as is the case with the red in the males, is of a different tone than in females of the other subspecies known from Sumatra and surrounding islands.

Junge² and Deignan¹ made it clear that *modiglianii* and *minythomelas* differ in size: birds belonging to the latter race average somewhat smaller, but perhaps the colour difference in the females of both these forms may be seen as the most important character to separate them as pointed out also by Deignan¹. According to Junge² there should be no colour differences in the plumage of both these subspecies when compared with *xanthogaster*, except for the somewhat yellowish tint of the red in both mentioned races when seen in series. I could not confirm this, but my material shows a darker fire-red tone in the males of *xanthogaster* than in both other subspecies, though certain individuals cannot be separated at all. But I did not compare these subspecies on the basis of Deignan's conception regarding colour and markings on rectrices and primaries because I could not see Deignan's paper when comparing my material in Bogor.

Both our fresh skins from Ujung Kulon seem somewhat intermediate between representatives of the Javan subspecies *siebersi* and *xanthogaster* from Sumatra because the male is decidedly brighter red on the lower back,

upper tail-coverts and wings than all *siebersi* examined by me, but not so dark as in the average *xanthogaster*. It is also deeper black in the dark portions than almost all *siebersi* studied by me; also in this respect more resembling Sumatra's population. On the under surface too the Ujung Kulon male is more intensely red than most Javan birds, but not so clear red as in *xanthogaster*. When compared with some specimens belonging to *excul* from the Lesser Sunda Islands (Lombok) the difference is still more striking because this subspecies averages lighter in the red of the male than *siebersi*.

The female obtained from Ujung Kulon resembles *xanthogaster* females in the same respect as does the male, the yellow on all parts of the plumage resembles that of *xanthogaster* because it is less pure, more washed with olive than in all females of *siebersi* seen by me.

Besides these differences in colour there is also one in size between *xanthogaster* and *siebersi*, at least in the males. And also on this point our Ujung Kulon male seems to be closer to the Sumatran race than to that inhabiting Java for it has a wing length of 87 mm. which is much larger than the average wing size of all 15 males of *siebersi* measured by Junge (in litt.) and me of which only one reaches a wing-length of 86, three of 84 and one of 83 mm. The subspecies *modiglianii* and *minythemelas* are considerably larger and differ also in plumage from both *siebersi* and *xanthogaster*. On account of the diagnosis given for the female of the Bornean race *insulanus* of which the male should not differ from that of *xanthogaster*, the female from Ujung Kulon cannot be identical with this race, even if it should agree in size which seems not to be so.

Though there seems some reason to separate these birds, I do not think it reasonable to do so because only one male and one female are available of which, moreover, the female still shows some traces of the juvenile plumage. Until more material becomes available, showing the same characters as both birds described above, there is not enough evidence to exclude the possibility of interbreeding.

Measurements (in mm.):

♂♂ Wing; *siebersi* (Java): 79, 82, 82, 83, 86; *siebersi*? (Ujung Kulon): 87; *excul* (Lombok): 85, 85; *xanthogaster* (Sumatra): 82, 84, 86, 87, 87; *modiglianii* (Enggano Island): 93, 95; *minythemelas* (Simalur Island): 95.

Tail; *siebersi* (Java): 78, 79, 81, 83, 85; *siebersi*? (Ujung Kulon): 85; *excul* (Lombok): 83, 86; *xanthogaster* (Sumatra): 73, 77, 77, 79, 85; *modiglianii* (Enggano Island): 82, 85; *minythemelas* (Simalur Island): 89.

Culmen; *siebersi* (Java): 11, 11.3, 11.9, 12.5, 12.5; *siebersi*? (Ujung Kulon): 10.6?; *excul* (Lombok): 10.5, 11.5; *xanthogaster* (Sumatra): 12, 12, 12.1, 12.5, 12.5; *modiglianii* (Enggano Island): 13, 14.5; *minythemelas* (Simalur Island): 12.3.

Max., min. and average measurements:

	<i>siebersi</i> Java	<i>siebersi</i> ? Udj. Kulon	<i>excul</i> Lombok	<i>xanthogaster</i> Sumatra	<i>modiglianii</i> Enggano Isl.	<i>minythemelas</i> Simalur
Wing:	79-86	87	85-85	82-87	93-95	95
	82.40		85	85.20	94	
	78-85		83, 86	73-85	82, 85	
Tail:	81.20	85	84.50	78.20	83.50	89
	11-12.6		10.5, 11.5	12-12.5	13, 14.5	
Culmen:	11.86	10.6?	11	12.22	13.75	12.3

♀♀ Wing; *siebersi* (Java): 80, 82, 83, 85, 86; *siebersi?* (Ujung Kulon): 83; *excul:* none; *xanthogaster* (Sumatra): 82, 82, 84, 85, 85; *modiglianii* (Enggano): 89, 94; *minythomelas* (Simalur): none;

Tail; *siebersi* (Java): 77, 81, 83, 85, 85; *siebersi?* (Ujung Kulon): 86; *xanthogaster* (Sumatra): 75, 78, 79, 80, 80; *modiglianii* (Enggano): 85, 87;

Culmen; *siebersi* (Java): 10.2, 10.9, 11, 11.6, 11.9; *siebersi?* (Ujung Kulon): 11.5; *xanthogaster* (Sumatra): 11.1, 11.1, 11.2, 11.8; *modiglianii* (Simalur): 13, 13;

Max., min. and average measurements:

	<i>siebersi</i> Java	<i>siebersi?</i> Ujung Kulon	<i>xanthogaster</i> Sumatra	<i>modiglianii</i> Enggano
Wing:	80-86	83	82-85	89, 94
	83.20		83.60	91.50
	77-85		75-80	85, 87
Tail:	82.20	86	78.40	86
	10.2-11.9		11.1-11.8	13, 13
Culmen:	11.12	11.50	11.30	13

siebersi (measured for me by Dr. Junge at Leiden):

	Wing:	Tail:	Culmen:
10 ♂	80-84	74-82	11-14
	81.50	77	12
	79-83	77-81	11-14
5 ♀	81	79	12

Some measurements compiled from literature:

Junge³: *minythomelas*:

Wing, 9 ♂ 88-94; Tail: 81.5-90; Culmen: 12-14

Wing, 2 ♀ 87.5-90; Tail: 86, 87.5; Culmen: 12, 13

Robinson & Boden Kloss⁴:

<i>xanthogaster</i> :	82-87
Wing, 9 ♂	84
	80-87
Wing, 10 ♀	84.10

Deignan¹:

<i>minythomelas</i> :	Wing, 9 ♂ 90-94	<i>modiglianii</i> :	Wing, 14 ♂ 92-96
	3 ♀ 88-90		5 ♀ 92-93
<i>insulanus</i> :	Wing, 3 ♂ 81-84	<i>siebersi</i> :	Wing, 6 ♂ 80-84
	3 ♀ 80		2 ♀ 77
<i>excul</i> :	Wing, 3 ♂ 82-85	<i>xanthogaster</i> :	Wing, 2 ♂ 77-86
	3 ♀ 81-83		1 ♀ 88

References:

- Deignan, H. G. The races of the Scarlet Minivet [*Pericrocotus flammeus* (Forster)]; *Auk*, 63, 1946, p. 511/33.
- Junge, G. C. A. On a collection of birds from Enggano; *Treubia*, 16, 1937-1938, p. 350/1.
- , Fauna Simalurensis—Aves; *Temminckia* I, 1936, p. 53-4.
- Robinson, H. C. and Boden Kloss, C. On a large collection of birds chiefly from West Sumatra made by Mr. E. Jacobson; *Journal of the Federated Malay States Museums*, 11, 1924, p. 280-1.

